but not significantly increased risk of hemorrhagic stroke (HR: 1.43; 95% CI: 0.80-2.56). **CONCLUSIONS:** Warfarin discontinuation is associated with increased risk of ischemic stroke and TIA in NVAF patinets. Further study is warranted to examine long-term clinical and economic outcomes of warfarin discontinuation.

RI3

DISPARITY IN HIGH RISK MEDICATION USE BETWEEN DUAL AND NON-DUAL ELIGIBLE MEDICARE ADVANTAGE BENEFICIARIES: A DECOMPOSITION ANALYSIS

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OBJECTIVES: The CMS Five Star Rating system for Medicare Advantage (MA) informs beneficiaries about plan performance and determines Quality Bonus Payments. High Risk Medication (HRM) use is a triple weighted measure defined as the percent of beneficiaries aged 65+ who received two or more fills for a drug with high risk of serious side effects in the elderly. This analysis evaluates differences in HRM use between dual eligible (DE) and non-DE members and examines the contribution of socio-demographic and clinical characteristics to observed disparities. **METHODS:** The study used a nationally representative administrative claims database of 1.5 million MA members in 2011-2012 (measured in member years): 232,273 DE (female: 66.3%; average age 75.4) and 1,251,145 non-DE (female 57.4%; average age 75.2). The Linear Probability Model (LPM) and Blinder-Oaxaca decomposition techniques with Neumark weighting formula were performed. **RESULTS:** HRM rate was 32.2% higher in DEs (16.8% vs. 12.7%). The decomposition analysis found member characteristics accounted for only 48% of the performance gap ("explained gap"); 52% was attributed to differential effects of member characteristics on HRM use ("unexplained gap"). The Charlson Severity Score indicates more complex comorbidities in DEs (2.34 vs. 1.77) and explained 70.6% of the difference in HRM use; disability as original reason for entitlement explained 23.3%. Members of a Preferred Provider Organization (PPO) and older members were less likely to use HRMs, while females and low income members were associated with higher use. **CONCLUSIONS:** This study provides information about the contribution of socio-demographic and clinical characteristics to higher use of HRMs in DEs, and can support targeted interventions to reduce the performance gap. The analysis further demonstrates that more than half the disparity is not explained by the member characteristics evaluated and points to the need for further research to understand the factors behind the unexplained DE gap.

RI4

RISK FACTORS ASSOCIATED WITH METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) BACTEREMIA IN THE UNITED STATES

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OBJECTIVES: MRSA bacteremia is associated with significantly greater mortality, length of stay (LOS), and hospital costs compared to methicillin-susceptible *S. aureus* (MSSA) bacteremia. With the changing epidemiology of *S. aureus* infections, we sought to identify risk factors for MRSA bacteremia. **METHODS:** Our case-control study identified MRSA (cases) or MSSA (controls) bacteremia hospitalizations, using diagnosis codes, from the 2009 Nationwide Inpatient Sample (n=7,810,762). These were further categorized into community-associated (principal diagnoses) or hospital-associated (secondary diagnoses) infections. Significant independent predictors of MRSA bacteremia, as compared to MSSA bacteremia, were identified from logistic regression models. Differences in outcomes were assessed with $\chi 2$ or Wilcoxon tests. **RESULTS:** Our study included 12,907 MRSA and 9,380 with MSSA bacteremia hospitalizations. Lower median household income (<$38,999 versus $63,000 or more) was significantly associated with MRSA bacteremia (odds ratio [OR]=1.34, p<0.01). African Americans (OR=1.32, p<0.01) were at higher risk while Asian or Pacific Islanders (OR=0.80, p=0.02) were at lower risk of developing MRSA bacteremia compared to Whites. The presence of certain comorbidities increased the risk of MRSA bacteremia as compared to MSSA (p<0.01): paralysis (OR=1.65), other neurological disorders (OR=1.38), chronic pulmonary disease (OR=1.27), peripheral vascular disease (OR=1.27), psychosis (OR=1.23), weight loss (OR=1.19), and renal failure (OR=1.13). Alternatively, the odds of other comorbidities were lower with MRSA bacteremia (p<0.01): coagulopathy (OR=0.85), hypertension (OR=0.84), and metastatic cancer (OR=0.77). Similar results were found in community-associated and nosocomial infection subgroups. MRSA was associated with significantly higher mortality (MRSA 63%, MSSA 37%), LOS (MRSA 16 days, MSSA 14 days), and hospital costs (MRSA $114,176, MSSA $104,408) (p<0.01). **CONCLUSIONS:** Our study identified additional predictors of MRSA bacteremia among a large, nationally representative source population of 7 million patients. These included income, race, and comorbidities, which were either risk factors for MRSA bacteremia, as compared to MSSA, or protective against MRSA, indicating a greater association with MSSA.

UTILITY MEASUREMENT STUDIES

UT1

EQ-5D: WHICH DIMENSION MATTERS MOST AMONG DIABETES PATIENTS

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OBJECTIVES: EQ-5D is a frequently applied instrument to measure Health Related Quality of Life (HRQoL) among patients. The HRQoL is measured based on a 5-item questionnaire covering: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. The objective of our study was to identify which of these 5 dimensions has the biggest influence on the HRQoL scores of diabetes patients. **METHODS:** A cross-sectional survey of diabetes patients (n = 1480) living in the United States. Each patient completed a questionnaire, which included the EQ-5D-5L instrument and accompanying VAS. Scores provided by the patients were analyzed by means of descriptive statistics and linear regression modeling. **RESULTS:** Most diabetes patients are reporting pain, only 29% of the patients reports no pain or discomfort. 48% of the patients report mobility problems, 36% reports problems with usual activities, 34% report problems with anxiety or depression. Only 10% of diabetes patients report problems with self-care. From a regression modeling point of view, with EQ-5D dimensions used to predict VAS scores, pain/discomfort scores have a standardized β–value of -0,44. For the other dimensions the following β–values were found anxiety/depression (-0,3), mobility (-0,22), self-care (-0,21), and usual activities (-0,09). **CONCLUSIONS:** From the five dimensions included in the EQ-5D-5L pain/discomfort has the largest negative influence on the HRQoL of diabetes patients, problems with usual activities and self-care have least impact. Although a lot of research has already been conducted in the field of diabetes patient pain/discomfort management further investigation is warranted.

UT2

HEALTH STATE UTILITIES ASSOCIATED WITH ATTRIBUTES OF TREATMENTS FOR HEPATITIS C

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OBJECTIVES: Current treatments for chronic hepatitis C (CHC) are frequently associated with complex regimens and serious adverse events. Little is known about the impact of these treatment attributes on health state utilities. The purpose of this study was to estimate the utility or disutility (i.e., utility decrease) associated with treatment administration and adverse events of CHC treatments. **METHODS:** Health states were drafted based on literature review and expert clinician interviews. General population participants in the UK (London, Edinburgh) valued the health states in time trade-off (TTO) interviews with both 10-year and 1-year time horizons. The 14 health states described hepatitis C with variations in treatment attributes: number of tablets per day, weekly injection, fatty food requirement, and six adverse events. **RESULTS:** A total of 182 participants completed interviews (50% female; mean age = 39.3y). In treatment regimens without injections, greater numbers of tablets were associated with slightly lower utility (1 tablet = 0.80; 2 tablets = 0.80; 3 tablets = 0.80; 7 tablets = 0.79). Utilities for health states describing regimens with oral and injectable medication were 0.77 (7 tablets), 0.75 (12 tablets), and 0.71 (18 tablets). Addition of a weekly injection to a 7-tablet regimen had a disutility of -0.02. The requirement to take tablets with fatty food had a disutility of -0.04. Adverse events were associated with substantial disutilities: mild anemia, -0.12; severe anemia, -0.32; flu-like symptoms, -0.21; mild rash, -0.13; severe rash, -0.48; depression, -0.47. These utilities are from the 10-year TTO; one-year scores were very similar. **CONCLUSIONS:** Adverse events and greater treatment regimen complexity were associated with utility reductions, suggesting a perceived decrease in quality of life beyond the impact of hepatitis C itself. The resulting utilities may be used in models estimating and comparing the value of treatments for hepatitis C.

UT3

ASSESSING FACTORS ASSOCIATED WITH SELF-REPORTED HEALTH STATUS IN THE UNITED STATES USING A STRUCTURAL EQUATION MODEL

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OBJECTIVES: To assess the relationship between self-reported health status and lifestyle, access to health care and individual characteristics using a U.S. representative sample. **METHODS:** A cross-sectional study using the 2011 US Behavioral Risk Factor Surveillance System (BRFSS) Survey database was performed. A structural equation model (SEM) was applied to investigate individual characteristics factors (age, body mass index (BMI), income and education levels), lifestyle factors (fruit, vegetable and alcohol consumptions and exercise levels), and access to health care factors (statuses on insurance, private health care provider and barrier to health service due to cost) that influence various self-reported health statuses (general health status, physical health status and mental health status). **RESULTS:** The mean age of the study population was about 43.5 years with 51.2% being female. The measures of model fitness (RMSEA<0.05 is 0.951; GFI=0.954) showed the internal structure of the model was acceptable and the observed variables would suffice in accounting for latent variables. The proportion of variance in each indicator was explained well by its respective latent variable (e.g. 58.7% of variance in general health, 60.4% in insurance and 59.0% in income were explained). All independent latent variables (access to health care, individual characteristics and lifestyle) were significantly associated with health status. Individual characteristics factors have the largest effect (β=0.719) on health status, followed by lifestyle factors (β=0.141) and access to health care factors (β=0.136). **CONCLUSIONS:** Our findings show that improved access to health care and lifestyle were associated with increased self-reported health status. In particular, older individuals with high BMI index and low socioeconomic status were more likely to report worse health status.

UT4

DEVELOPMENT AND VALIDATION OF AN APPROACH TO INTERPRET COMPUTERIZED ADAPTIVE TEST SCORES FOR ASSESSING PATIENT OUTCOMES

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OBJECTIVES: There is great interest in using computerized adaptive tests (CAT) to assess health outcomes. CATs are based on Item Response Theory (IRT) and yield a numeric estimate, but it is difficult to interpret the health status and clinical meaning from these scores. Item maps generated from IRT analyses and bookmarking procedures facilitate development of levels, and provide a meaningful context for CAT scores. We aim to develop and validate the levels for Spinal Cord Injury Functional Index (SCI-FI) used as a functional outcome measure for persons with SCI. The specific objectives are: (i) Develop levels for five SCI-FI domains: basic mobility, self-care, fine motor, wheelchair and ambulation; (ii) Determine